

Operating Characteristics of a Neodymium
Glass Laser, by N. V. Grevtsev, 5 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, No 3, 1969, pp 20-22.
AIR/FTD-HT-23-876-70

Jun 71

The Mechanism of Growth of Whiskers from the
Gas Phase, by Ye. V. Borisov, I. P. Taskayev.
14 pp.

RUSSIAN, par, Fizika i Khimiya Obrabotki
Materinlov, No 3, 1969, pp 38-45.

AIR/FTD/MT-24-87-70

Sci-Phys
Dec 70

Temperature Stresses Forming in Cylinders Under
the Effect of a Luminous Flux, by
V. I. Daninovskaya, V. N. Zukchaninova. 5 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, No 4, 1969, pp 16-18.
RTR/FTD-RT-23-34-70

sci/physics
may 70

Thermodynamic Analysis of the chemical reactions taking place during the growth of sapphire whiskers, by
RU S. A. Ammer, K. S. Kutakov. 5 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 6, 1969, pp 47-49.
AIR/FTD-MT-24-891-71

apr 72

Antifriction Properties of Binary Alloys of
Aluminum-Copper and Aluminum-Manganese in
Relation to Their Structural Diagrams, by
A. G. Vinit'skiy, A. V. Galyko, and B. I.
Kostetskiy. 8 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, No 6, 1969, pp 118-122.
AIR/FTD/MT-24-51-71

Sept 71

Effect of Irradiation with a High-Power Electron
Beam on the Structure and Microhardness of a
Silicon Single Crystal, by V. P. Alekhin,
I. V. Gridneva, et al. 7 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, No 6, 1969, pp 123-126.
AIR/FTD/HT-23-525-70

Sci-Phys
Dec 70

Phase Transformations in Steel Caused by a CW-laser
Beam, by A. I. Barchukov.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 6, 1969, pp 126-129.
NAVY/APL/JHU-T-2669

Nov 72

Effect of Laser Action on the Ionization Emission From the Surface of Metals, by V. S. Kortov, et al. 9 pp.
RUSSIAN, per, Plasma i Zhivaya Obrazovani Mater-
ialov, No 1, 1970, pp 3-7.
AIR/PTD-HT-23-93-71

Aug 71

A. N. Lapin

The Effect of Neutron Irradiation on the
Mechanical Properties of 18Cr-10Ni-Ti Steel.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, No 1, 1970, pp 8-13
NTC 72-13202-11F

sept 72

REC (LB/G-3074) METAL-FIBRE-REINFORCED
CERAMICS (A REVIEW). Busalov, Yu. E.; Kop'ev, I. M. ¹⁰
Translated by J. A. Bartlett (Atomic Energy Research Establish-
ment, Harwell, Eng.), from ¹¹¹Fiz. Khim. Obrab. Mater.: No. 1,
57-69(1970). ²⁰22p. ²⁴Dep. NTIS (U. S. Sales Only).

²⁵

²⁶ceramics; refractories; translations ²⁷11B

²⁸MN-25 ²⁹NP NSA

NTC 72-14180-11B

NLL LB/G/3074F

Special Features of Deformation and the Mechanical
Properties of Nickel/Titanium Composites Rein-
forced with Tungsten Wire, by
Ch. V. Kopetskiy, et al.
RUSSIAN, per, Trilka i Khimika Obrabotki Mater-
ialov, No 1, 1970, pp 70-78
AIR/FTD-HT-23-43-71

July 71

Evaluation of Technological Variants of Refining
of AK4 Alloy on the Basis of Accelerated Fatigue
Tests, by G. A. Deryagin, 5 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 1, 1970, pp 155-157.
AIR/FPD/HT-23-793-71

Nov 71

Calculation of the Energy Balance in Explosion
Welding, by V.S. Sedykh, 13 pp.
RUSSIAN, per. Fizika i Khimiya Obrabotki Materialov, No 2, 1970, pp 6-13.
ACSI-K-2599
FSTC-HT-23-2049-72

Aug 72

The Part Played by Bulk Vaporization in the Heating
of Metals by Laser Radiation, by N. N. Rykalin.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 2, 1970, pp 30-33.
NAVY/APL/JHU-T-2670

Nov 72

Effect of Lubricating-Cooling Fluids and Methods
of Using Them on the Dynamics of the Cutting and
Scratching Process by an Individual Abrasive Grain,
by L. V. Khudobin. 22 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 2, 1970, pp 121-132.
AIR/FTD-HC-23-348-71

Oct 71

The effect of titanium coatings on the plasticity of molybdenum, by V. N. Ashazha, V. M. Amonenko. 7 pp. RUSSIAN, per, Fizika i khimiya obrabotki materialov, No 3, 1970, pp 59-62
AIR/FTD-MT-24-791-71

apr 72

Dispersion Hardening of Copper by Tungsten, by
B. A. Borok, et al. 11 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 3, 1970, pp 68-74.
AIR/FTD-MT-24-892-71

Feb 72

Z. M. Gelunova

Effect of high-pressure shock waves on the structure and properties of bimetals produced by different cladding methods. 19 pp.

RUSSIAN, Fizika i khimiya obrabotki materialov, No 3, 1970, pp 110-120

AIR/FTD-HT-23-525-72

nov 72

AF 0 (SC-T-71-3017) EXPLOSION-LIKE PROCESSES
DURING THE PULSED TREATMENT OF MATERIALS BY AN
ELECTRON BEAM. Noskov, D. A.; Pankovets, N. G. Trans-
lated by Marcel I. Weinreich (Sandia Labs., Albuquerque, N. Mex.),
from Fiz. Khim. Obrab. Mater.; No. 4, 16-20(1970). 12p.
Dep. NTIS.

materials; physics; translations 11, 20

MN-34 P NSA

Mechanism of the Removal of Copper During Electron
Beam Melting of Steel, by Yu. A. Kurapov.

RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
Vol 4, No 4, July-Aug 1970, pp 37-42.

*NTIS TT 72-53023

Mar 72

High-Strength State of Metals Resulting from
Substructural Hardening, by L. A. Gordiyenko,
24 pp.

RUSSIAN, per. Fizika i Khimiya Obrabotki Materialov,
Moscow, No 4, 1970, pp 59-74.
JPRS 51625

Sci-Mat
Oct 70

RUSSIAN

5/624

0001 0634/71

22 Sep 70

8
57

1. The high strength state of metals is affected by substructural hardening, by L. K. Gordienko.
2. On the possibility of using the gaseous medium for extraction of materials, by L. V. Vavreshchegina, Ya. S. Konyayev, et al.

Moscow, Fizika i Khimiya obrabotki materialov,
No 4, 1970, pp 514-518, 287-288.

Please publish

B. A. Basm

*Physical properties of molten high-alloy steels and
special alloys. 11 pp.*

RUSSIAN, per, Fizika i khimiya obrabotki materialov,

No 5, 1970, pp 43-48

AIR/FTD-MT-24-1858-71

sept 72

I. I. Vergasov

*Diffusion interaction of components during the calorizing
of niobium-titanium alloys. 9 pp.*

RUSSIAN, per, Fizika i khimiya obrabotki materialov,

No 6, 1970, pp 46-49

AIR/FTD-MT-24-1874-71

sept 72

V. G. Osipov

The Mechanism of Superplasticity in Nickel-Chromium Eutectic Alloys.

RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov, No 6, 1970, pp 76-81

NTC 72-13216-11F

sept 72

V. M. Kirillov

Ratio of Liquid and Gaseous Phases During the
Action of Focused Laser Radiation on Metals.

RUSSIAN. per. Priloga k Khimii i Mekhanike Metallov.

no. 1, 1972, pp. 1-11.

NTC 72-13581-11F

NASA TTF 13 906 10 pp

Nov 72

A. G. Zhdanovich

Autoradiography of the deformed surface of silicon and germanium. 6 pp.

RUSSIAN, Fizika i Khimiya Obrabotki Materialov, No 1, 1971, pp 147-149

AIR/FTD-HT-23-1214-72

jan 73

State of Developments and Research Problems on
the Switching of Silicon---, by L.L. Silin,
13 pp.

RUSSIAN, per. Fiz Khim Obrab Mater, No 2,
1971, pp 116-125.

ACSI-K-2600

FSTC-HT-23-2026-72

Jul 72

Segregation of Carbides During High Temperature
Thermomechanical Treatment (HMT), by M. P. Matveeva.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 2, 1971, pp 191-199.
NTC 72-14481-11F
NLL-RTS-6920

Jan 73

A. P. Khudyshev

Study of the technological possibilities for pulsed
electron-beam welding of sheet materials. 11 pp.
RUSSIAN, Fizika i Khimiya Obrabotki Materialov. No 3,
1971, pp 13-19
AIR/FTD-MT-24-1490-72

jan 73

RUSSIAN *Camp 22*
10/11 CMO: 0239/72 V
4 May 1972 SP

Ultrasonic treatment of high-strength nickel alloys,
by O. V. Abramov et al.

Moscow, Stalim i Kaimiya Obrabotki Materialov, No. 3,
1971, pp 67-72.

Ad Hoc
Special type B
Do not publish
Original plus 4 copies

Z. I. Kornilova

Investigation of the heat resistance of ST-4 Titanium alloy and certain protective coatings on it. 7 pp.
RUSSIAN, Fizika i Khimiya Obrabotki Materialov, No 3, 1971, pp 115-115
AIR/FTD-HT-23-1118-72

nov 72

V. I. Lainer

Effect of an Homogenizing Diffusion Annealing
on the Protective Properties of Coatings Obtained
by Hot Dip Galvanizing.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov,
No 3, 1971, pp 134-138.
NTC 72-13785-11F

Nov 72

RUSSIAN

Comp. Special?

CSO: 0078/73

14 Jul 72

SF

1590

Heat resistance of welds on a nickel base, by
M. S. Briksvskiy, et.al.

Moscow, Fizika i khimiya obrabotki materialov, No 4,
1971, pp 117-123.

Ad Hoc

Spec type B

Do not publ

Original plus four copies - including reproductions.

Quality of figure reproductions will be adequate for t
this translation.

Effect of Reversibility on Exomission and Corrosion of
Steel, by V. D. Yevdokimov, 7 pp.

FIZIKA I KHIMIYA OBRABOTKI MATERIALOV, No 4, 1971,
pp 142-144.

AIR/FTD/HT-23-1411-72

Feb 73

Effect of Carbon on the Mechanical Properties
of Titanium Beta-Alloy Weld Joints, by
V. B. Vikhman, A. S. Mikhaylov, 10 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki
Materialov, Moscow, No 6, Nov-Dec 1971,
pp 48-54.
JPRS 55393

Mar 72

Theory of Crystallization Methods for the Purification of Metals. Mathematical Methods for Studying Physicochemical Characterization of Behavior of Impurities in Zonal Recrystallization, by A. I. Vol'pyn, 14 pp.
RUSSIAN, bk, Fiziko-khimicheskaya Sushchestvennaya Kristallizatsionnykh Protsessov Glubokoy Oshchidki Metallov, Moscow, 1970, pp 7-16.
JPRS 52552

Sci-Chem
Mar 71

Theory of Processes of Ion Adsorption
with Active Film, by N. N. Rozin, 7 pp.
RUSSIAN, bk. ~~Radio-Enginierskaya Osnova Kristal-~~
~~linitsionnykh Prilozheniy~~ Gidroskop Osnovni
Metalloy, Moscow, 1970, pp 23-27.
JPRS 52552

Soc-Chem
Mar 71

Physico-Chemical Features of Behavior of Impurities in the Crystallization Refining of Metals.
Features of the Behavior of Impurities in Refinement of Several Low-Melting Metals by Zone Melting,
by B. N. Alexandrov, V. I. Gerasimov, 9 pp.

RUSSIAN, bk. Fiziko-khimicheskiye osnovy kristal-
litsatsionnykh protsessov (Fundamental Principles
of Metallography, Moscow, 1970, pp 28-34,

JPRS 52552

Physico-Chemical Fundamentals of Zone Recrystallization of Magnesium, by A. I. Belyayev, V. N. Vlgdorevich, 10 pp.
RUSSIAN, bk, Khimiko-Metallurgicheskiy Osnovy Kristallizatsionnykh Protsessov Glubokoy Galistiki Metalloy, Moscow, 1970, pp 34-41.
JPRS 52552

Sol-Chem
Mar 71

Effect of Third Component on Aluminum Refining
by Zone Melting, by A.I. Nekova, A. I. Bulyayev,
8 pp.

RUSSIAN, bk, Fiziko-khimiya Osnovy Kristal-
lizationnykh Protsessov Gilyakov Oshchepko
Metalloy, Moscow, 1970, pp 42-46.
JPRS 52552

Sci-Chem
Mar 71

Investigation of Physico-Chemical Features of
Behavior of Selenium Impurity in Tellurium in
Zone Recrystallization, by G. I. Shulashko, 9 pp.
RUSSIAN, bit, Fiziko-Khimicheskaia Osnova Kristal-
lizatsionnykh Protsessov Glubokoy Ochlazh-
deniya, Moscow, 1970, pp 47-53.
JPRS 52552

Sol-Chem
Mar 71

Investigation of Behavior of Impurities in
Noncrucible Zone Melting of Rectractory Metals,
by Sh. I. Fayzullayev, 13 pp.
RUSSIAN, bk, Виско-химический журнал Кристал-
лизационный Прогнозов Глубокой Обработки
Металлов, Moscow, 1970, pp 53-62.
JPRS 52552

Sci-Chem
Vol. 77

Impurity Distribution in Molybdenum Monocrystals
Produced by Electron Beam Zone Melting, by
Sh. I. Papisulayev, V. N. Ezhov, 9 pp.
RUSSIAN, bk. Fiziko-khimicheskiye Osnovy Kristal-
litsirovaniya Protopopov G. I. i dr. Sibirskii
Metallor. Moscow, 1970, pp 62-69.
JPRS 52552

Sci.-Chem.
Mar 71

Crystallization Refinement of Ionic Indium
Chlorides, by P. I. Fedorov, N. S. Malova, 9 pp.
RUSSIAN, bk. ~~Plasma-Khimiya~~ ~~Chim. Kristal-~~
~~lization~~ ~~Protsessy~~ ~~Glubokoy~~ ~~Ochistki~~
Metallor, Moscow, 1970, pp 73-80.
JPRS 52552

Sci-Chem
Mar 72

Calculation of Effective Impurity Distribution
Ratios During Growth of Monocrystals from Melt,
by K. M. Rozin, O. L. Kraynin, 10 pp.
RUSSIAN, bk, ~~Plasma-Chemistry~~ ~~Chemistry~~ ~~Crystal-~~
~~Liantsionnykh~~ ~~Protasov~~ ~~Gilbert~~ ~~Schmidt~~
Mikhailov, Moscow, 1970, pp 80-88.
JPRS 52552

Sci-Chem
Mar 71

Investigation of Efficacy of Zinc Refinement of
Bismuth, Tellurium and Their Compounds, by
N. M. Konyshova, L. A. Firsova, 5 pp.
RUSSIAN, in: ~~Khimiya~~ ~~Khimicheskaya~~ ~~Chimicheskaya~~ ~~Kristal-~~
~~litsiya~~ ~~sobremennogo~~ ~~Protsessirovaniya~~ ~~Chistota~~
~~Metalloy~~, Moscow, 1970, pp 48-51.
JPRS 52552

Sci-Chem
Mar 71

Influence of Procedural and Mechanical Factors
on Results of Refinement of Metals by Crystal-
lization Methods. New Methods of Intensification
of Crystallization Processes Using a Mobile
Magnetic Field, by K. M. Rozhn, 10 pp.
RUSSIAN, bk. Physiko-Khimicheskiye Osnovy Kristal-
lizationnykh Protsessov Glibokoy Ochistki
Metallov, Moscow, 1970, pp 92-99.
JPRS 52542

Sci-Chem
Mar 73

Effect of Technological and Mechanical Factors
on Results of Aluminum Refining by Zone Melting
Method, by S. Ye. Maryev, 3 pp.
RUSSIAN, bk. Elektronicheskaya Osmotv Kristal-
litsionnykh Protsessov Gilubokoy Oshladi-
Metally, Moscow, 1970, pp 105-110.
JPRS 52552

Sci-Chem
Mar 71

Results of Investigation of Operation of Experimental Installation for Continuous Zone Recrystallization for Antimony Refining. by

У. Н. Вагдонорвич, У. В. Марячев, 15 pp.

RUSSIAN, bk. Platko-Sidlichovskiy Onory Kristal-
lichensomaycha Protchessov Glubokoy Ochistki
Metallay. Moscow, 1970, pp 110-122.

JUN 52 552

X-Ray Diffraction Analysis of Fine Structure of Nanocrystals Produced by Zone Recrystallization, by A. I. Yevstyukhin, A. A. Rusakov, 6 pp. RUSSIAN, bk. Plazma-fizika i khimicheskaya Kristallograficheskaya Protsessy (Plasma Physics and Crystallographic Processes), Metallurg, Moscow, 1970, pp 123-128. JPRS 52552

Soc.-Chem
Mar '71

Identification Structure of Refractory Metals of
Group VII as Function of Production Method,
by V. N. Rykov, M. I. Zakharova, 5 pp.
RUSSIAN, bk. Fiziko-Khimicheskiye Osnovy Kristal-
lizationnykh Protsessov Glubokoy Ozhizhki
Metallurg, Moscow, 1970, pp 128-133.
JPRS 52552

Sci-Edcom
Mar 71

Investigation of Effect of Automatic Control and
Crucible Shape on Long Recrystallization Process,
by V. V. Krapulchin, V. N. Maslov, 6 pp.
RUSSIAN, bk. Uzlikh-Khimiya Novoye Kristal-
lization Protsessy Gibkoye Oshlady
Metalloy. Moscow, 1970, pp 137-138.
JPRS 52552

Sol-Chem
Mar 71

Production of Homogeneous Alloyed Monocrystals,
by V. M. Vigdorovich, A. Ye. Vol'pyn, 5 pp.
RUSSIAN, bk. Vysokomol'molekul'yarnyye Kristal-
llogicheskiye Protsessy Gibbsovskiy Khimicheskiy
Metallurg, Moscow, 1970, pp 146-150.
JPRS 52552

Sol-Chem
Mar 71

Directed Crystallization of Compounds During
Impurity Exchange of the Melt with the Atmos-
phere and Crucible, by V. N. Vagdonovich,
A. Ye. Vol'pyn, 10 pp.
RUSSIAN, bk. Riziko-Rizicheskaya Osnova Kristal-
litsatsionnykh Protsessov Glubokoy Geliatsii
Metallurg, Moscow, 1970, pp 148-150.
JPRS 52552

Solo-Chem
Mar 71

Mechanical-Procedural Features of Continuous Zone Refining Under Flux, by V. M. Vinogradovich, A. P. Kolesnev, 6 pp.
RUSSIAN, bk., High-Temperature X-Ray Crystallography, Igor' Nikolaevich Protchenko, Gleb Borisovich Shtetki, Nataliya, Moscow, 1970, pp 156-158.

JPRS 52552

Sol-Chem
Mar 71

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VISCOSITY OF MOLTEN CAST IRON

NAKAGAVA I

UR: FIZ KHIM OSN MET PROTSESSOV TRUDY

SOV. YAPONSKOGO SIMP., 1969, pp 146-156

*In process as**HC-23-71-1948**Negative
57-291*

REQ TR CHECK

22-03-73

T395

THE PHYSICO-CHEMICAL PRINCIPLES OF THE
FORMATION OF DEPOSITS IN JET FUELS
BOL'SHAKOV, G.F.

UR: FIZKO-KHIMCHESKIY OSNOVY OBRAZOVANIYA
OSADKOV V REAKTIVNYKH TOPLIVAKH, 1972,
231 pages

Press in as
MT73-24-0382

neg
28 MAR 73

Physical and Chemical Fundamentals in the Use
of Motor, Jet and Rocket Fuels, by G. F.
Bol'shakov, Ye. I. Gulin and N. N. Torichnev,
324 pp.

RUSSIAN, bk, Fiziko-Khimicheskiye Osnovy Pri-
meneniya Motornykh, Reaktivnykh i Raketnykh
Topliv, 1965, 270 pp.

JPRS 36701

USSR
sci-chem
Aug 66

308,121

P. V. Gel'd

P. V. Kocherov

Viscosity, density and surface energy of molten alloys
of iron and silicon. 7 pp.

RUSSIAN, per, Fiziko-khimicheskiye osnovy proizvodstva
stali, 1968, pp 9-13.

AIR/FTD-HC-23-1881-71

july 72

RUSSIAN

Comp. 20
11/77CDS: 0340/73 W
26 Oct. 1972 SF

Interaction of nitrogen with nickel-base liquid
alloys, by A. M. Samarin, & V. F. Kashin.

Moscow, Metko-khimicheskoye ommoye proizvodstvo
stali, 1971, pp 68-73.

Ad Hoc

Special type D

Do not publish

Original plus 4 copies.

T. D. 3 November 1972.

Physiocochemical Principles of Gluing and
Adhesion Processes, by N. I. Moskvitin. 185pp.
RUSSIAN, bk, Fiziko-Khimicheskie Osnovy Prot-
sessov Skleivaniya i Prilipaniya, 1964, 1969.
CFSTI TT 68-50368

Sci/physics
apr 69

380,078

RUSSIAN

*Comp Sp
5/11*CSO: 0566/73 W
14 Sep 72 SF

Physicochemical principles in radiobiological
processes and in radiation protection, by
L. Kh. Eydus. (appendices 1 & 2).

Moscow, Fiziko-khimicheskiye osnovy radiobiologicheskikh
protsessov i zashchity ot izlucheniya, 1972,
pp 222-224.

Ad Hoc

Spec type B

Do not publish

Translator's draft plus one copy - including
reproductions of graphics.

Physicochemical Principles of Vibration Compaction, (Vibratory Compacting: Principles and Methods), by Shatalova, et al, RUSSIAN, bk, Fiziko-Khimicheskiye Osnovy Vibratsionnogo Uplotneniya Poroskhovykh Materialov, 1965, 162 pp.

•CB

Sci-Chem
Nov 66

Physical Chemistry of Semiconductor Surfaces, by
F. F. Vol'kenshtein.
RUSSIAN, bk, Fiziko-Khimiya Poverkhnosti Poluprovodnikov,
1973.
*IPST

Jan 73

Physical Chemistry of the Positron and
Positronium, by V. I. Goldanskiy.
RUSSIAN, bk, Fizicheskaya Khimiya
Pozitrona i Pozitroniya, 1968.
PLENUM PRESS

Sci/Chemistry
Nov 68

368,910

Physicochemical Nature of Phases of Variable
Composition, by N. N. Sirota.
RUSSIAN, bk, Fiziko-Khimicheskaya Priroda Faz
Peremennogo Sostava, 1969
PLENUM PRESS

Sci/Chem
Sep 68

363,237

Physical Chemistry of Alloys and Refractory Compounds
of Thorium and Uranium, by O. S. Ivanov, 260 pp.
RUSSIAN, bk, Fiziko-Khimiya Splavov i Tugoplavkikh
Soedineniy s Toriem i Uranom, 1968.

NTIS TT 71-50053

AEC-tr-7212

UC-04

Apr '72

Physicochemical Properties of Nonstoichiometric Oxides,
by A. N. Men.

RUSSIAN, bk, Fiziko-Khimicheskie Svoistva
Nastekhiometricheskikh Okislov, 1973.

*IPST

Sept 72

Physicochemical Properties of Polymers, by
Yu. S. Lipatov. 576 pp approx.
RUSSIAN, bk, Fiziko-khimicheskia Svalstva
Polimerov, 1970.
CONSULTANTS BUREAU/PLINUM PRESS

sci/physics
sept 69

390,867

Rapid Determination of Oxygen Content During
Steel Melting and Tapping by emf Method, by
M. F. Panin.
RUSSIAN, per, Fiz. Khim. Teplofizicheskie
Protsessy Kristalizatsii, Stalnykh Slitkov,
Kiev, 1965, 26, 1967.
*DISI 7406

sci/ materials
sept 69

Physics of Comets and Meteors,
RUSSIAN, bk. Fizika Komet i Meteorov, 1965,
pp 1-91.
CFSTI TT 67-51213
NASA TT F-340 *changed*
430

Sci-Astron & Astro
Feb 67

319,110

Comet Physics: Interdepartmental Collection.
RUSSIAN, bk, Fizika Komet: Mezhdometstvennyi
Sbornik, Maukova Dumka.
PLENUM PRESS

Sci/Physics
Aug 67

336,628

Physics of Crystal Dielectrics, by
I. S. Zheludev.
RUSSIAN, bk, Fizka Kristallicheskikh
Dielektrikov, 1968.
PLENUM PRESS

Sci-Phys
Jan 69

373,533

The Physics of Ice, by V. V. Bogorodskiy, 157 pp.
RUSSIAN, bk, Fizika l'da, 1970.
NTIS TT 70-50158

July 71

Physics of the Moon and Planets, 116 pp.
RUSSIAN, bk, Fizika Lunny i Planet, 1966,
pp 1-112.
NASA TT F-502

Sci-Astron
Oct 69

393,415

Photometric Study of the Lunar Surface
Relief in the Vicinity of Kepler's
Crater, by L. R. Lisina.
RUSSIAN, per, Fizika Luny i Planet,
1966, pp 95-109
NTC 72-12334-03B

July 72

D. Ya. Martynov

Physics of the Moon and Planets International Symposium, October 15-22, 1968, Kiev.

Fizika luny i planet. Mezhdunarodnyy Simpozium, 15-22 Oct. 1968, Kiev. "Nauka" Press, Moscow, 1972.

472pp.

*NTIS-TT-73-58026

NASA TT F-772

Apr 73

Possibilities of Application of Teaching Machines
in Public Instruction, by V. Metev. 28 pp.
RUSSIAN, per, Fiziko-Matematicheskoe Sposobie,
Vol 3, No 2, 1965, pp 121-135. P
FTD-HT-66-752

Sci/Behavioral & Social Sci
Dec 67

345,872

Second Congress of Bulgarian Mathematicians,
29 August-7 September 1967, 27 pp.
BULGARIAN, per, Fiziko-Matematicheskoe Spisanie,
Vol 10, No 1, Oct-Dec 1967, pp 251-270.
JPRS 45,618

Sci/Math Sci
Aug 68

361,369

Physiology, Medicine, and Technical Progress,
by Ye. B. Babakiy and V. V. Parin, 101 pp.
RUSSIAN, bk, Fiziologiya, Meditsina i Tekh-
nicheskoy Progress, 1965, pp. 3-139.
JPRS 33246

USSR
Sci-B/M
Dec 65

292,560

The Physics of Slow Positrons and Atomic Processes,
by P. U. Arifov.
RUSSIAN, bk, Fizika Medlennykh Pozitronov i Atomnye
Protsessy, 1971.
*IPST

May 71

U. I. Moiseyenko

Effect of temperature and pressure on some physical
properties of rocks. 8 pp.
RUSSIAN, Fiziko mekhanicheskiy svoystva gornyykh porod
verkhney chasti zemnoy kory. Doklady simpozii, 1968,
pp 148-152
AIR/FTD-MT-24-1965-71

oct 72

"Physical and Mechanical Properties of Fiber-Glass
Reinforced Plastics" (A Collection of Articles),
by Yu. M. Molchanova. 311 pp.

RUSSIAN, bk, Fizicheskiye i Mekhanicheskiye
Svoystva Stekloplastikov, 1969, pp 1-267.

AIR/FTD/MT-24-96-70

ARM/FSTC-HT-23-660-70

Sci-Mat
Dec 70

Physiological Mechanisms of the Action of
Accelations, by A. A. Segeyev.
RUSSIAN, bk, Fiziologicheskiye Mekhanizmy
Deystviya Uskoreniy, 1967, pp 1-399.
*JPRS 16249

JPRS GUD 2603

Sci-B&M
Sept 67

THE PHYSICS OF METAL COATINGS

SVECHNIKOV V N LANGUAGE-~~RU~~ COUNTRY-~~UR~~

FIZIKA METALLICHESKIKH PLENDK

NAUKOVA DUMKA KIEV 1969 116PP

FSTC-~~HT~~-23-2135-72

Some Aspects of Vacuum Technology Used for the
Deposition of Thin Films, by B. S. Danilin.
RUSSIAN, rpt, Fizika Metallicheskih Plenok.
Metallofizika, No 26, 1969, pp 77-87.
NTC-71-16101-11F

Jan 72

FIZIKA METALLOV I METALLOVEDENIE
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Metallography - monthly)
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new

Effect of Alloying on the Temperature
Dependence of the Normal Modulus of the
Elasticity of Titanium, by S. F. Kovtun,
R. A. Ul'yanov, 10 pp.
RUSSIAN, per, Fiz Metallov i Metallov,
Vol XIX, No 2, 1965, pp 263-267. 9699607
FTD-TT-65-1462

Sci - M/M
Feb 66

294,809

Strength of Nickel and Iron Films Obtained by
Vacuum Condensation, by L. S. Palatnik.
RUSSIAN, per, Fizika Metallov i Metallovedeniye,
Vol 19, No 2, 1965, pp 310-311.
NASA TT F-11,447

Sci
Dec 68

371,121

Diffusion of Sulfur in Iron, by
I. P. Kononyuk.
RUSSIAN, per, Fiz, Metal i Metalloved.
Vol XIX, 1965, pp 311-313.
NASA TT F-9491

Sci-Chem
Nov 65

292,829

Influence of Alloying on the Softening and
Heat Resistance of Chromium-Nickel Austenite,
by M. M. Shteynberg, V. K. Parafonov, E. G.
Tret'yakova and D. A. Mirzoyev, 10 pp.
RUSSIAN, per, Fizika Metallov i Metallovedeniye,
Vol 19, No 3, Mar 1965, pp. 411-417.
JPRS 30501

USSR
Sci-M/M
Jun 65

231,601

X-Ray Diffraction Study of Super-Saturated
Solid Solution Decomposition in Ticonal
Alloy, by L. M. Magat,
RUSSIAN, per, Fiz. Metal. i Metallov., Vol
XIX, No 4, 1965, pp 521-529.
NLL 5828.4 1965 (5809)

Sci-New Sci
Apr 67

322,943

High-Temperature Failure of Metals Under
the Action of Ultrasonic Vibrations, by
Yu. P. Balalov.
RUSSIAN per, Fizika Metallov i Metallo-
vedenie, vol 19, No 5, 1965, pp 735-740.
ID 6482

Sci/MQM
Nov 65

292,067

Properties of Iron Purified by Electron-Beam
Zone Melting, by V. I. Shiryayev and V. D.
Pautov, 5 pp.
RUSSIAN, per. Fizika Metallov i Metallovedeniye,
Vol 20, No 4, Oct 1965, pp. 566-569.
JPRS 37746

USSR
Sci-Materials
Oct 66

311,853

Physical Factors Responsible for the
Straightening of a Niminoc-Type Alloy, by
N. L. Baturinskaya and V. G. Chernyi,
RUSSIAN, per, Fiz. Metal. i Metallov., Vol
XX, No 4, 1965, pp 579-586.
NLL 9022.4B 1966 (66/5)

Sci-Phys
Apr 67

322,795

The Origin of Internal Stresses in Electro-
deposited Metals, by M. Y. Popereka,
RUSSIAN, per, Fiz. Metal. i Metallov., Vol
XX, No 5, 1965, pp 753-762.
NLL 9022.4 (66/67)

Sci-Mech
Apr 67

324,161

Neutron Diffraction Study of Ordered Ni-Mn
Alloys, by S. K. Sidorov and A. V. Doroshenko,
RUSSIAN, per, Fiz. Metal. Metalloved., Vol
XX, 1965, pp 850-859,
AEC ANL-Tr-344

Sci-Materials
Nov 66

313,701